

**Claims:**

1. A system for providing a file retrieval, storage and forwarding service for a user of a data communication network, said system comprising:
  - a file transfer server connected to said network; said file transfer server communicating with said user to receive first and second different requests from at least one workstation operated by said user; said file transfer server including:
    - elements responsive to a said first request to retrieve a data file from a source on said network identified in the respective request, said source remote from both said user workstation and transfer server, said elements acting further to store the retrieved file for said user;
    - elements for confirming to said user retrieval and storage of said requested file; and
    - elements responsive to a said second request issued by said user to transmit said stored file to said user.
2. A system in accordance with claim 1 wherein said first request may be issued by said user when, due to conditions at said user's workstation, it is more convenient to said user to have said file retrieved and stored by said file server than to download said file directly to said user's workstation.
3. A system in accordance with claim 2 wherein said conditions at said user's workstation and the size of the requested file make it impractical for said user to directly download said requested file to said user's workstation.
4. A system in accordance with claim 2 wherein said conditions at said user's workstation involve execution of tasks more important than retrieval of the requested file, which tasks would be unduly impeded by direct downloading of the requested file to said user's workstation.
5. A system in accordance with claim 2 wherein said requested file is a large file, said user issues said first request from a first workstation operating at a slow transmission speed that makes it impractical for said user to directly download said requested file; and said user issues said second request from a second workstation operating at a fast transmission speed more conducive to efficient retrieval of the

requested file.

6. A system in accordance with claim 2 wherein:

said user workstation at which said first request is issued lies behind a firewall which effectively prevents transfer of data directly from said remote source to the respective workstation, but does not prevent transfer of data from said transfer server to the same workstation.

7. A system in accordance with claim 5 wherein both said transfer server and a workstation instantly operated by said user to issue said first request are behind said firewall and said remote source of data is outside said firewall.

8. A system in accordance with claim 5 wherein both said transfer server and a workstation operated by said user to issue said second request are situated behind said firewall, and wherein said remote source of data and another workstation operated by said user to issue said first request are situated outside said firewall.

9. A system in accordance with claim 5 wherein both the transfer server and a workstation operated by said user to issue said first request are behind said firewall, and said remote data source and another workstation operated by said user to issue said second request are outside said firewall.

10. A method of providing a data file retrieval, storage and forwarding service to a user of a data communication network, relative to a source of a data file remote from said user, said method comprising:

maintaining a transfer service facility connected to said network;

operating said facility to receive first and second requests at different times from workstations operated by said network user;

responding to said first request to retrieve a data file from said remote source via said network; the location of said source on said network being indicated in said first request;

storing said retrieved data file for said user; and

responding to said second request to transmit said stored data file to a workstation instantly operated by said user to issue said second request.

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11. A method of providing a file retrieval, storage and delivery service in accordance with claim 9 wherein said first and second requests are issued by different workstations remote from each other, both operated by said user.

12. A method in accordance with claim 9 wherein said first and second requests are both issued by a single workstation operated by said user.

13. A method in accordance with claim 9 including the step, between responses to said first and second request, of notifying said user of successful completion of said retrieval and storing operations.

14. A method in accordance with claim 12 wherein said network is the Internet; said workstation operated by said user to issue said first request employs a browser program to locate said remote data source; and said step of notifying said user of said successful completion comprises sending an e-mail message to said user containing said notification; and

said second request is issued by said user contingent upon receipt of said confirming message.

15. The method of claim 12 wherein said first and second requests are issued at said user workstations by service programs provided by said service; said service programs being configured to run concurrent with said browser program; whereby transmittal of said first request presents minimal interference to other data processes currently being executed at the workstation instantly operated by said user to issue said first request; and whereby processes executed at said workstation, other than said service programs and browser program, are minimally impeded by the transmittal of said first request.

16. The method of claim 12 wherein both said transfer server and a single said workstation issuing said first and second requests are behind a firewall; and said remote data file source is outside of said firewall; wherein said firewall is effective to prevent direct transmittal of said data file from said remote source to said single workstation, but ineffective to block transmittal of the same file from said source to said transfer server, and also ineffective to block transmittal of the same file from said transfer server to said single workstation.

17. The method of claim 12 wherein:

said first and second requests are issued respectively by first and second different workstations;

said transfer server and said second workstation are behind a firewall restricting communications between said network and both said second workstation and said transfer server; and

said first workstation and said remote source are outside said firewall.

18. The method of claim 12 wherein:

said first and second requests are respectively transmitted from different first and second workstations operated by said user;

said first workstation and said transfer server are behind a firewall effectively preventing direct transmission of said data file from said remote source to said first workstation, but permitting transmission of said data file from said remote source to said transfer server; and

said second workstation and said remote source are both outside said firewall.

19. A program for a client user of a network transfer service, said service operating a transfer server, in response to requests received from said client, to retrieve, store and forward data from sources specified in said requests, said program comprising:

elements for forming retrieval requests containing a network location from which data is to be retrieved;

elements for connecting a workstation used by said client to said transfer server;

elements for transmitting said retrieval requests to said transfer server;

elements for forming transfer requests indicating data stored at said transfer server which is to be forwarded to said client; and

elements for transmitting said transfer requests to said transfer server.

20. A program for a transfer server operated by a network transfer service, said transfer operating relative to a data transmission network to retrieve, store and forward data in behalf of client users of said transfer service; said program comprising:

elements responsive to retrieval requests received from said client users to retrieve and store data for respective client users; said retrieval requests specifying network locations at which respective data is to be retrieved;

elements operating on completing retrieval and storage of data specified in said retrieval requests for transmitting notification communications to respective said client users; and

elements responsive to transfer requests received from said client users for forwarding data stored in response to prior retrieval requests to respective client users.